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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/360,881    07/23/99    HENRY    R    HE01-003

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QM12/0920

EXAMINER

VARMA, S

ART UNIT

PAPER NUMBER

3711

DATE MAILED:

09/20/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
09/360,881

Applicant(s)

Henry

Examiner

Sneh Varma

Group Art Unit  
3711



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-21 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-21 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-9, 15-17 and 18-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kajita et al. '380 (Kajita).

Kajita discloses a set of golf clubs comprising a plurality of adjacently sequenced golf clubs, wherein a first golf club in the set has a club length at least about 0.6 inches to 1 inch longer than a second adjacent golf club in the set and that the set has a club length between about 1.2 inches and 2 inch longer than the second alternating sequential adjacent golf club in the set (Abstract (15-30 mm); Column 3, lines 1-34).

Kajita also discloses that the set has a lie angle between about 0.6 degrees and 1 degree less than the second adjacent golf club in the set and that the set has a lie angle between about 1.2 degrees and 2 degrees less than the second alternating sequential adjacent golf club in the set (Abstract; Column 3, lines 35-39).

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*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg '686 (Lundberg) in view of, Peters et al. '112 (Peters) and Adams et al. '296 (Adams).

Lundberg discloses a set of golf clubs comprising a plurality of adjacently sequenced golf clubs, wherein a first golf club in the set has a club length at least about 0.5 inches longer than a second adjacent golf club in the set and that the set has a club length between about 1 inches and 2 inch longer than the second alternating sequential adjacent golf club in the set. However, Lundberg fails to disclose that the club length is 0.75 inches longer and that the set has a club length between about 1.2 inches and 2 inch longer than the second alternating sequential adjacent golf club in the set. Peters teaches that it is known in the art to vary the length of the shaft in a set ( Column 1, lines 63- 64; Column 2, lines 6-10) and Adams teaches the use of dynamically matched sets by setting the moment of inertia which is a function of club shaft length and weight (Column 5, lines 12-36). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Peters and Adams in the Lundberg device to design a set with the length difference of 0.75 inches between the adjacent clubs and a

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difference of 1.2 to 2 inches between the second alternating sequential adjacent golf club in the set to improve the performance of the set of clubs.

5. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 1 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose the set has a lie angle between about 0.6 degrees and 1 degree less than the second adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree (Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

6. Claims 8 -9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 4 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose the second golf club has a lie angle at least about 0.6 degrees less than the third golf club.. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree (Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the

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second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 0.6 degree lie angle depends on the cost and requirements for manufacturing.

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 16 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the set has a lie angle between about 1.2 degrees and 2 degrees less than the second alternating sequential adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree (Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 1.2- 2 degree lie angle depends on the cost and requirements for manufacturing.

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8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 17 above, and further in view of Sherwood '145 (Sherwood).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the first golf club in the set has a lie angle of about 1.5 degrees less than the second alternating sequential adjacent golf club in the set. Sherwood teaches the use of a set which has a lie angle difference of 0.5 -1 degree (Column 4, lines 35-38, lines 60-61) and that the set has a lie angle between about 1.0 degrees less than the second alternating sequential adjacent golf club in the set (Column 6, Table 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Sherwood in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs. Clearly a choice of a difference of 1.5 degree lie angle depends on the cost and requirements for manufacturing.

9. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita , as applied to claim 1 `above, and further in view of Chen et al. '138 (Chen).

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the

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invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

10. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita , as applied to claim 8 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs. For an artisan skilled in the art a choice of the lie angles will be dependent upon the cost and the manufacturing requirements.

11. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita , as applied to claim 7 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second adjacent golf club in the set (Column 1, lines 19-21; lines 35-50). It would have



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been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs. For an artisan skilled in the art a choice of the lie angles will be dependent upon the cost and the manufacturing requirements.

12. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita , as applied to claim 16 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second alternating sequential golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

13. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajita , as applied to claim 18 above, and further in view of Chen.

Kajita discloses the invention as recited above and further discloses that the weight difference is 6 gm (Column 5, Table 1), however fails to disclose that the weight difference is 9-16 grams. Chen teaches the use of a golf club set such that the set has a club head weight between about 1 grams and 45 grams less than the second alternating sequential golf club in the set (Column 1, lines 19-21; lines 35-50). It would have been obvious to one having ordinary skill in

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the art at the time the invention was made, to have utilized the teachings of Chen in the Kajita device to improve the performance of the set of golf clubs.

14. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundberg in view of, Peters and Adams, as applied in the Claim 1 above, and further in view of Nishizawa et al. '198 (Nishizawa).

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the first golf club in the set has a club head weight between about 8 grams and 12 grams less than the second adjacent golf club in the set. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

15. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over as applied to claim 8 above, and further in view of Nishizawa.

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in

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the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

16. Claims 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over as applied to claim 7 above, and further in view of Nishizawa.

The modified Lundberg device discloses the invention as described above, however, fails to disclose that the second golf club has a club head weight of at least about 9 grams less than the third golf club. Nishizawa teaches the use of a set which has a weight difference of 6-14 gm (Column 4, Table 1; Column 1, lines 54-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teachings of Nishizawa in the modified Lundberg device to improve the performance of the golfer's swing when using a set of golf clubs.

### *Conclusion*

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Varma whose telephone number is (703) 308-8335. The examiner can normally be reached on Monday to Friday from 8:00 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jeanette Chapman, can be reached on (703) 308-1310.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7768. Any inquiry of a general nature or relating to the status of this

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application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1078.

August 16, 2000

Sneh Varma, Patent Examiner

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